Claims for Escape-Right

We claim,

1) An emergency escape system comprising:

(a) A passenger harness,

(b) A cable detachably attached to the harness,

(c) A reel connected to the cable for storage of the cable,

(d) A shaft attached to the reel permitting rotation of the reel as the cable is unrolled from the reel,

(e) A reduction gear assembly fixed to the shaft to multiply the reel rotation rate,

(f) A centrifugal brake assembly attached to the reduction gear assembly,

(g) A housing enclosing the brake assembly,

(h) A mounting means fixing the housing to a point of support.

2) The emergency escape system of claim 1 wherein the mounting means is configured to attach to a prepared mounting point within a building or dwelling structure.

3) The emergency escape system of claim 1 wherein the mounting means is configured to attach to the top of a ladder positioned near an egress port of a building or dwelling structure.

4) The emergency escape system of claim 1 wherein the cable includes flexible attachment points spaced to accommodate multiple descents without rewinding the cable on the reel.

5) The emergency escape system of claim 1 wherein the shaft is detachably attached to the reel.

6) An emergency escape system comprising:

(a) A passenger harness,

(b) A cable connecting to the mounting means,

(c) A reel connected to the cable for storage of the cable,

(d) A shaft fixed to the reel permitting rotation of the reel as the cable is unrolled from the reel,

(e) A reduction gear assembly fixed to the shaft to multiply the reel rotation rate,

(f) A centrifugal brake assembly attached to the reduction gear assembly,

(g) A housing enclosing the brake assembly,

(h) A mounting means fixing the housing to the passenger harness.

7) The emergency escape system of claim 6 wherein the mounting means is configured to attach to a prepared mounting point within a building or dwelling structure.

8) The emergency escape system of claim 1 wherein the mounting means is configured to attach to the top of a ladder positioned near an egress port of a building or dwelling structure.

9) A centrifugal brake for the escape system of claim 1 comprising:

(a) A circular casing,

(b) A circular central plate with a plurality of tabs,

(c) A plurality of brake shoes fitted over the plurality of tabs,

(d) A shaft connecting the central disk and piercing the casing at the center of the circular cross section of the casing to connect to a external source of rotary motion.

10) The centrifugal brake of claim 8 wherein the plurality of tabs and brake shoes consists of two tabs and two brake shoes.